Service personnel shall fully coordinate Environment efforts with Endangered Species efforts to provide timely, consistent, and unified recommendations for resolution of fish and wildlife impacts, to the extent possible. More specifically, Environment and Endangered Species personnel shall coordinate all related activities dealing with investigations of land and water developments. This includes full use of all provisions that can expedite Service achievement of "one-stop shopping," including coordinated early planning involvement, shared permit review activities, consolidated permit reporting, and consolidated flow of pre-project information to developers, consistent with legislative mandates and deadlines.

- j. The Service will place high priority on and continue to develop and implement procedures for reducing delays and conflicts in permit related activities. Such procedures will include, but not be limited to:
  - (1) Joint processing of permits.
  - (2) Resource mapping.
- (3) Early provision of ecological design information.
- (4) Involvement in Special Area Management Planning.
- k. The Service will encourage predevelopment compensation actions by Federal action agencies which can be used to offset future unavoidable losses for lands or waters not adequately protected by an existing law, policy, or program.

Banking of habitat value for the express purpose of compensation for unavoidable future losses will be considered to be a mitigation measure and not an enhancement measure.

Withdrawals from the mitigation "bank" to offset future unavoidable losses will be based on habitat value replacement, not acreage or cost for land purchase and management.

## 5. Mitigation Means and Measures

Mitigation recommendations can include, but are not limited to, the types of actions presented below. These means and measures are presented in the general order and priority in which they should be recommended by Service personnel with the exception of the "no project" alternative. (See Section 4(a)).

## a. Avoid the impact

(1) Design project to avoid damage or loss of fish and wildlife resources including management practices such as timing of activities or structural features such as multiple outlets, passage or avoidance structures and water pollution control facilities.

- (2) Use of nonstructural alternative to proposed project.
  - (3) No project.

## b. Minimize the impact

- (1) Include conservation of fish and wildlife as an authorized purpose of Federal projects.
- (2) Locate at the least environmentally damaging site.
  - (3) Reduce the size of the project.
- (4) Schedule timing and control of initial construction operations and subsequent operation and maintenance to minimize disruption of biological community structure and function.
- (5) Selective tree clearing or other habitat manipulation.
- (6) Control water pollution through best management practices.
- (7) Time and control flow diversions and releases.
  - (8) Maintain public access.
- (9) Control public access for recreational or commercial purposes.
  - (10) Control domestic livestock use.

## c. Rectify the impact

- (1) Regrade disturbed areas to contours which provide optimal fish and wildlife habitat or approximate original contours.
- (2) Seed, fertilize and treat areas as necessary to restore fish and wildlife resources.
- (3) Plant shrubs and trees and other vegetation to speed recovery.
  - (4) Control polluted spoil areas.
- (5) Restock fish and wildlife resources in repaired areas. Fish stocking or introductions will be consistent with the Service Fish Health Policy (January 3, 1978).
- d. Reduce or eliminate the impact over time
- (1) Provide periodic monitoring of mitigation features to assure continuous operation.
- (2) Assure proper training of project personnel in the operations of the facility to preserve existing or restored fish and wildlife resources at project sites.
- (3) Maintain or replace equipment or structures so that future loss of fish and wildlife resources due to equipment or structure failure does not occur.

# e. Compensate for impacts

- Conduct wildlife management activities to increase habitat values of existing areas, with project lands and nearby public lands receiving priority.
- (2) Conduct habitat construction activities to fully restore or rehabilitate previously altered habitat or modify existing habitat suited to evaluation

species for the purpose of completely offsetting habitat value losses.

- (3) Build fishery propagation facilities.
- (4) Arrange legislative set-aside or protective designation for public lands.
  - (5) Provide buffer zones.
  - (6) Lease habitat.
  - (7) Acquire wildlife easements.
  - (8) Acquire water rights.
  - (9) Acquire land in fee title.

## 6. Follow-up

The Service encourages, supports, and will initiate, whenever practicable, post-project evaluations to determine the effectiveness of recommendations in achieving the mitigation planning goal. The Service will initiate additional follow-up studies when funds are provided by the Federal action agency.

In those instances where Service personnel determine that Federal agencies or private developers have not carried out those agreed upon mitigation means and measures, then the Service will request the responsible Federal action agency to initiate corrective action.

# APPENDIX A—OTHER AUTHORITIES AND DIRECTION FOR SERVICE MITIGATION RECOMMENDATIONS

#### LEGISLATIVE

Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.). The 1977 amendments require the Fish and Wildlife Service ". . . upon request of the Governor of a State, and without reimbursement, to provide technical assistance to such State in developing a Statewide (water quality planning) program and in implementing such program after its approval." In addition, this Act requires the Service to comment on proposed State permit programs for the control of discharges of dredged or fill material and to comment on all Federal permits within 90 days of receipt.

Federal Power Act of 1920, as amended (16 U.S.C. 791(a), 803, 811). This Act authorizes the Secretary of the Interior to impose conditions on licenses issued for hydroelectric projects within specific withdrawn public lands. The Secretary is given specific authority to prescribe fishways to be constructed, maintained, and operated at the licensee's expense.

Estuary Protection Act (16 U.S.C. 1221–1226). This Act requires the Secretary of the Interior to review all project plans and reports for land and water resource development affecting estuaries and to make recommendations for conservation, protection, and enhancement.

Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1464). This Act